

WHAT IS CLAIMED IS:

- 1           1.       A method for assigning a work item for one of a plurality of nodes in a  
2 workflow to at least one of a plurality of users capable of performing workflow related  
3 operations at the nodes, comprising:  
4           processing a node in a current workflow, wherein a current work item is  
5 associated with the processed node;  
6           determining users capable of being assigned the current work item;  
7           for each determined user, determining a number of work items other than the  
8 current work item assigned to the user;  
9           selecting at least one determined user based on the determined number of work  
10 items assigned to the determined users; and  
11          assigning the current work item to the at least one determined user.
- 1           2.       The method of claim 1, wherein the determined number of work items  
2 assigned to each user includes active work items assigned to the user in workflows other  
3 than the current workflow.
- 1           3.       The method of claim 2, wherein the determined number of work items  
2 further include active work items assigned to the user in the current workflow other than  
3 the current work item.
- 1           4.       The method of claim 1, wherein the determined users comprise users on an  
2 access list associated with the current workflow.
- 1           5.       The method of claim 1, wherein determining the number of work items  
2 assigned to each user further comprises:  
3           determining work items for which the user has exclusive access; and

4 determining work items that are not owned by another user and that are associated  
5 with an access list that includes the user.

1 6. The method of claim 1, wherein selecting at least one determined user  
2 based on the determined number of work items assigned to the determined users further  
3 comprises:  
4 for each work item assigned to the user, determining a priority related to the work  
5 item;  
6 for each user, calculating an index based on each priority related to each work  
7 item assigned to the user; and  
8 using the index to select one user to assign the new work item.

1 7. The method of claim 6, wherein the priority related to the work item  
2 comprises a priority assigned to the workflow in which the work item is included.

1 8. The method of claim 6, further comprising:  
2 receiving a user defined priority, wherein the user defined priority is the priority  
3 related to the work item.

1 9. The method of claim 8, wherein the user defined priority is for the  
2 workflow including the work item assigned to the user.

1 10. The method of claim 6, further comprising:  
2 receiving a user defined priority scheme associating a plurality of user defined  
3 priorities with a plurality of normalized ratings; and  
4 determining a user defined priority related to the work item, wherein the  
5 determined priority related to the work item used to calculate the index comprises the  
6 normalized rating associated with the user defined priority.

1           11.     The method of claim 6, wherein the selected user comprises the user  
2     having a lowest index value.

1           12.     The method of claim 11, further comprising:  
2           if no one user has the lowest index value, determining from the users having a  
3     same lowest index value one user having a least number of assigned work items, wherein  
4     the determined user having the least number of assigned work items comprises the  
5     selected one user.

1           13.     The method of claim 6, further comprising:  
2           using an arbitrary criteria to select one user if no user is selected using the user  
3     indexes.

1           14.     The method of claim 6, further comprising:  
2           using the index to determine at least one additional user to assign the new work  
3     item.

1           15.     A system method for assigning a work item in a workflow, comprising:  
2           a storage device;  
3           a database in the storage device, wherein the database includes a plurality of  
4     workflows, wherein each workflow includes a plurality of nodes and work items, wherein  
5     during execution of the workflow, the work items for the nodes are assigned to users  
6     capable of performing workflow related operations at the nodes, comprising:  
7           means for processing a node in a current workflow, wherein a current work item is  
8     associated with the processed node;  
9           means for determining users capable of being assigned the current work item;  
10          means for determining, for each determined user, a number of work items other  
11     than the current work item assigned to the user;

12 means for selecting at least one determined user based on the determined number  
13 of work items assigned to the determined users; and  
14 means for assigning the current work item to the at least one determined user.

1 16. The system of claim 15, wherein the determined number of work items  
2 assigned to each user includes active work items assigned to the user in workflows other  
3 than the current workflow.

1 17. The system of claim 16, wherein the determined number of work items  
2 further include active work items assigned to the user in the current workflow other than  
3 the current work item.

1 18. The system of claim 15, wherein the determined users comprise users on  
2 an access list associated with the current workflow.

1 19. The system of claim 15, wherein the means for determining the number of  
2 work items assigned to each user further performs:  
3 determining work items for which the user has exclusive access; and  
4 determining work items that are not owned by another user and that are associated  
5 with an access list that includes the user.

1 20. The system of claim 15, wherein the means for selecting at least one  
2 determined user based on the determined number of work items assigned to the  
3 determined users further performs:  
4 for each work item assigned to the user, determining a priority related to the work  
5 item;  
6 for each user, calculating an index based on each priority related to each work  
7 item assigned to the user; and

8 using the index to select one user to assign the new work item.

1 21. The system of claim 20, wherein the priority related to the work item  
2 comprises a priority assigned to the workflow in which the work item is included.

1 22. The system of claim 20, further comprising:  
2 means for receiving a user defined priority, wherein the user defined priority is the  
3 priority related to the work item.

1 23. The system of claim 22, wherein the user defined priority is for the  
2 workflow including the work item assigned to the user.

1 24. The system of claim 20, further comprising:  
2 means for receiving a user defined priority scheme associating a plurality of user  
3 defined priorities with a plurality of normalized ratings; and  
4 means for determining a user defined priority related to the work item, wherein  
5 the determined priority related to the work item used to calculate the index comprises the  
6 normalized rating associated with the user defined priority.

1 25. The system of claim 20, wherein the means for selecting the user selects  
2 the user having a lowest index value.

1 26. The system of claim 25, further comprising:  
2 means for determining, if no one user has the lowest index value, one user having  
3 a least number of assigned work items from the users having a same lowest index value,  
4 wherein the determined user having the least number of assigned work items comprises  
5 the selected one user.

1           27.     The system of claim 20, further comprising:  
2           means for using an arbitrary criteria to select one user if no user is selected using  
3     the user indexes.

1           28.     The system of claim 20, further comprising:  
2           means for using the index to determine at least one additional user to assign the  
3     new work item.

1           29.     An article of manufacture including code for assigning a work item for one  
2     of a plurality of nodes in a workflow to at least one of a plurality of users capable of  
3     performing workflow related operations at the nodes by:  
4           processing a node in a current workflow, wherein a current work item is  
5     associated with the processed node;  
6           determining users capable of being assigned the current work item;  
7           for each determined user, determining a number of work items other than the  
8     current work item assigned to the user;  
9           selecting at least one determined user based on the determined number of work  
10    items assigned to the determined users; and  
11    assigning the current work item to the at least one determined user.

1           30.     The article of manufacture of claim 29, wherein the determined number of  
2     work items assigned to each user includes active work items assigned to the user in  
3     workflows other than the current workflow.

1           31.     The article of manufacture of claim 30, wherein the determined number of  
2     work items further include active work items assigned to the user in the current workflow  
3     other than the current work item.

1           32.     The article of manufacture of claim 29, wherein the determined users  
2     comprise users on an access list associated with the current workflow.

1           33.     The article of manufacture of claim 29, wherein determining the number  
2     of work items assigned to each user further comprises:  
3             determining work items for which the user has exclusive access; and  
4             determining work items that are not owned by another user and that are associated  
5     with an access list that includes the user.

1           34.     The article of manufacture of claim 29, wherein selecting at least one  
2     determined user based on the determined number of work items assigned to the  
3     determined users further comprises:  
4             for each work item assigned to the user, determining a priority related to the work  
5     item;  
6             for each user, calculating an index based on each priority related to each work  
7     item assigned to the user; and  
8             using the index to select one user to assign the new work item.

1           35.     The article of manufacture of claim 34, wherein the priority related to the  
2     work item comprises a priority assigned to the workflow in which the work item is  
3     included.

1           36.     The article of manufacture of claim 34, further comprising:  
2             receiving a user defined priority, wherein the user defined priority is the priority  
3     related to the work item.

1           37.     The article of manufacture of claim 36, wherein the user defined priority is  
2     for the workflow including the work item assigned to the user.

1        38.    The article of manufacture of claim 34, further comprising:  
2        receiving a user defined priority scheme associating a plurality of user defined  
3        priorities with a plurality of normalized ratings; and  
4        determining a user defined priority related to the work item, wherein the  
5        determined priority related to the work item used to calculate the index comprises the  
6        normalized rating associated with the user defined priority.

1        39.    The article of manufacture of claim 34, wherein the selected user  
2        comprises the user having a lowest index value.

1        40.    The article of manufacture of claim 39, further comprising:  
2        if no one user has the lowest index value, determining from the users having a  
3        same lowest index value one user having a least number of assigned work items, wherein  
4        the determined user having the least number of assigned work items comprises the  
5        selected one user.

1        41.    The article of manufacture of claim 34, further comprising:  
2        using an arbitrary criteria to select one user if no user is selected using the user  
3        indexes.

1        42.    The article of manufacture of claim 34, further comprising:  
2        using the index to determine at least one additional user to assign the new work  
3        item.